


### AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph located at pg. 47, ln. 29 - pg. 48, ln. 19 with the following paragraph.

 **Figure 7** shows the results of the first constant current cycling at 0.2 milliamps per square centimeter between about 2.5 and 4.0 volts based upon about 16 milligrams of the  $\text{LiFe}_{0.8}\text{Mg}_{0.2}\text{PO}_4$  active material in the cathode (positive electrode). In an as prepared, as assembled, initial condition, the positive electrode active material is  $\text{LiFe}_{0.8}\text{Mg}_{0.2}\text{PO}_4$ . The lithium is extracted from the  $\text{LiFe}_{0.8}\text{Mg}_{0.2}\text{PO}_4$  during charging of the cell. When fully charged, about 0.79 units of lithium have been removed per formula unit. Consequently, the positive electrode active material corresponds to  $\text{LiFe}_{0.8}\text{Mg}_{0.2}\text{PO}_4$  where x appears to be equal to about 0.79, when the cathode material is at 4.0 volts versus  $\text{Li/Li}^+$ . The extraction approximately ~~[[140]]~~ 135 milliamp hours per gram corresponding to about 2.2 milliamp hours based on 16 milligrams active material. Next, the cell is discharged whereupon a quantity of lithium is re-inserted into the  $\text{LiFe}_{0.8}\text{Mg}_{0.2}\text{PO}_4$ . The re-insertion corresponds to approximately 122 milliamp hours per gram proportional to the insertion of essentially all of the lithium. The bottom of the curve corresponds to approximately 2.5 volts. The total cumulative specific capacity over the entire cycle is 262 mAh/g.